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NEW APPLICATION

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AZ CORP COMMISSION
DOCKET CONTROL



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ORIGINAL

December 17, 2010

HAND DELIVERED

Docket Control
Arizona Corporation Commission
1200 W. Washington St.
Phoenix, AZ 85007

E-02044A-10-0505

Re: *Net Metering Tariff for Dixie Escalante Rural Electric Association, Inc. ("Dixie Escalante"); Docket No. E-02044A-___ -___*

Dear Sir or Madam:

On behalf of Dixie Escalante, enclosed are the original and 13 copies of a proposed Net Metering Service Tariff (Schedule No. NM) to introduce net metering service in that portion of Dixie Escalante's service territory which is located in the State of Arizona.

An information sheet and documentation in support of the tariff are also enclosed. The tariff has a stated effective date of March 1, 2011. If Staff has questions concerning the tariff, please contact Colin Jack at (435) 673-3297 or colinj@dixiepower.com.

Very truly yours,

GALLAGHER & KENNEDY, P.A.

By:

Michael M. Grant

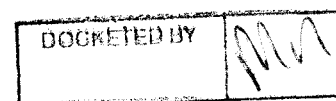
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10593-1/2616032
Enclosures

Original and 13 copies filed with Docket Control this 17th day of December, 2010.

Arizona Corporation Commission

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DEC 17 2010



**DIXIE ESCALANTE RURAL ELECTRIC ASSOCIATION
ELECTRIC SERVICE**

SCHEDULE NO. NM

**STATE OF ARIZONA
NET METERING SERVICE**

AVAILABILITY

This service is available to customers of the Cooperative with a qualifying Net Metering Facility.

DEFINITIONS

1. Net Metering Facility – A facility for the production of electricity that:
 - a. Is operated by or on behalf of a net metering customer and is located on the net metering customer's premises; and
 - b. Is intended primarily to provide part or all of the net metering customer's requirement for electricity; and
 - c. Uses Renewable Resources, a fuel cell, or Combined Heat and Power (CHP) to generate electricity; and
 - d. Has a generating capacity less than or equal to 125% of the net metering customer's total connected load or, in the absence of customer load data, capacity less than or equal to the customer's electric service drop capacity; and
 - e. Has the same nominal output voltage and phasing as the customer's electric service drop; and
 - f. Is interconnected with and can operate in parallel and in phase with the Company's existing distribution system; and
 - g. Meets or exceeds applicable local and national standards regarding electrical and fire safety, power quality and interconnection requirements. These standards include, but are not limited to, those established by the American National Standards Institute (ANSI), National Electrical Code (NEC), National Electrical Safety Code (NESC), Institute of Electrical and Electronics Engineers (IEEE) and Underwriters Laboratories (UL). All equipment necessary to comply with these standards and requirements shall be owned by and be the responsibility of the net metering customer; and
 - h. Is controlled by an Inverter that has been designed, tested and certified to meet or exceed UL 1741 and IEEE 1547 standards.
2. Combined Heat and Power (CHP) – A system that generates electricity and useful thermal energy in a single, integrated system such that the useful power output of the facility plus one-half the useful thermal energy output during any 12-month period must be no less than 42.5 percent of the total energy input of fuel to the facility.
3. Fuel Cell – A device that converts the chemical energy of a fuel directly into electricity without intermediate combustion or thermal cycles. For purposes of this rate schedule, the source of the chemical reaction must be derived from Renewable Resources.
4. Renewable Resources – Natural resources that can be replenished by natural processes, including: biogas, biomass, geothermal, hydroelectric, solar or wind.

METERING

Customers served under this rate schedule will require a bi-directional meter that will register and accumulate the net electrical requirements of the customer. The Cooperative will install such a meter at the customer's Net Metering Facility if proper metering is not already present. The incremental metering costs of \$745 for bi-directional metering will be incurred by the net metering customer and must be paid prior to installation of the meter. A bi-directional meter may not be required if the generating capacity of the Net Metering Facility is less than 10 percent of the customer's lowest billing demand over the previous 12 months, or as otherwise determined by the Cooperative through available information, and if the customer agrees that they do not intend to net any Excess Generation on their monthly bill.

BILLING

- a. The Cooperative's Customer Charges under this Net Metering Tariff shall be \$34.74 per month, which is in addition to any charges under the existing retail tariff.
- b. On a monthly basis, the net metering customer shall be billed or credited based upon the rates applicable under the customer's currently effective standard rate schedule and any appropriate rider schedules.
- c. If the kWh supplied by the Company exceed the kWh that are generated by the Net Metering Facility and delivered back to the Cooperative during the billing period, the customer shall be billed for the net kWh supplied by the Cooperative in accordance with the rates and charges under the customer's standard rate schedule.
- d. If the electricity generated by the net metering customer exceeds the electricity supplied by the Company in the billing period, the customer shall be credited during the next billing period for the excess kWh generated. The excess kWh during the billing period will be used to reduce the kWh supplied (not kW or kVA demand or customer charges) and billed by the Cooperative during the following billing period.
- e. Customers taking service under time-of-use rates who are to receive a credit in a subsequent billing period for excess kWh generated shall receive such credit during the next billing period during the on- or off-peak periods corresponding to the on- or off-peak periods in which the kWh were generated by the customer.
- f. Once each calendar year, in January for the previous year, the Cooperative shall issue a check or billing credit to the net metering customer for the balance of any credit due in excess of amounts owed by the customer to the Cooperative. The payment for any remaining credits shall be at the Cooperative's avoided cost, which is currently \$0.0162 per kWh.

TERMS AND CONDITIONS

The customer shall comply with the Cooperative's interconnection standards. The electrical function, operation or capacity of a customer generation system, at the point of connection to the Cooperative's distribution system, may not compromise the quality of service to the Cooperative's other customers. The Cooperative requires that the net metering customer enter into an interconnection agreement before a Net Metering Facility is interconnected. Service under this schedule will be in accordance with the above conditions and the Electric Service Agreement between the customer and the Cooperative. The Electric Service Regulations of the Cooperative on file with and approved by the Arizona Corporation Commission, including future applicable amendments, will be considered as forming a part of and incorporated in said Agreement.

EFFECTIVE: March 1, 2011

Supporting Information for the Proposed Net Metering Tariff in Arizona for Dixie Escalante REA

Background:

Dixie Escalante is a non-profit electric cooperative headquartered in southwestern Utah, with approximately 15,000 members, including approximately 2,000 members in a small portion of Mohave County, in the Arizona Strip in the northwest corner of Arizona between Utah and Nevada, around the communities of Littlefield, Beaver Dam and Scenic.

Connect Fee:

Dixie Escalante proposes to charge a connect fee of \$745 for single-phase Net Metering customers to cover the new and incremental costs of the Net Metering installation over and above those of a standard single-phase metering installation. The breakout of the costs is as follows:

Connection Costs:		
AXS4e 2s meter w/TS1	\$ 377.66	
Focus 2s meter w/TS1	\$ (112.00)	(credit)
Meterman	\$ 155.40	(3 hours)
Engineer	\$ 217.11	(3 hours)
Billing supervisor	\$ 72.37	(1 hour)
Billing clerk	\$ 34.74	(1 hour)
<hr/>		
TOTAL	\$ 745.28	

The AXS4e meter (\$377.66, *see invoice*) would need to replace the standard Focus meter (\$112.00, *see invoice*) to provide the Cooperative with the measurement of energy flow in both directions in order to properly meter the Net Metering installation. Since the Focus meters were installed very recently and probably can still be reused at another location, full credit is given for the removed meter.

And, since the Net Metering installations to-date on the Dixie Escalante service territory in Utah—where we have had a Net Metering tariff for four years—have been 100% retrofits, it is expected that net metering installations in Arizona will also be retrofits. Therefore, a Meterman will be required to travel from the Cooperative offices to the Net Metering installation, change out the metering, and then return to the offices, which is at least one hour each way. So, there will be the new and incremental costs of a minimum of three hours of the Meterman's time, at \$51.80/hour (*see breakout of time below*), required to properly install the new net meter.

Meterman Costs		
Wage	\$ 36.62	71%
Social Security	\$ 2.15	4%
Medicare	\$ 0.50	1%
Workmans Comp	\$ 0.80	2%
Insurance	\$ 4.31	8%
Disability	\$ 0.42	1%
401k	\$ 0.87	2%
Retirement	\$ 5.32	10%
H.S.A.	\$ 0.81	2%
<hr/>		
	\$ 51.80	

Also, before the Meterman can install the new net meter, the Cooperative's Engineer must first make a special trip to the Net Metering site to inspect the equipment and installation to ensure that the equipment complies with UL and IEEE standards and that the wiring and installation comply with the National Electric Safety Code (NESC) and the National Electric Code (NEC). As detailed above, this round trip is a minimum three-hour obligation, at \$72.37/hour (see breakout of time below), assuming that the engineer finds everything satisfactory and does not have to make return trips to verify remedial action. In the Cooperative's four-year experience with inspecting Net Metering installations, we have observed that there are technical errors in approximately 50% of the installations that require remedial action on the part of the generation equipment provider.

<u>Engineer Costs</u>		
Wage	\$ 54.31	75%
Social Security	\$ 3.34	5%
Medicare	\$ 0.78	1%
Workmans Comp	\$ 0.07	0%
Insurance	\$ 4.46	6%
Disability	\$ 0.55	1%
401k	\$ 1.24	2%
Retirement	\$ 7.62	11%
	<u>\$ 72.37</u>	

After the Engineer has determined that the Net Metering installation is correct and adequate for interconnection with the Cooperative's distribution system, and the Meterman has installed the net meter and submitted the requisite paperwork to the billing department, the Billing Supervisor and Billing Clerk must take at least one hour, at \$72.37/hour and \$34.74/hour, respectively, (see breakouts of time below), over and above the normal time allotted to set up a new account, to manually create a special Net Metering account, which will be read via the normal Turtle meter reading system, but will not receive an automated bill and will instead be tracked manually and receive a manually generated bill on a monthly basis. This hour for each of the two Cooperative employees will be new and incremental costs to the Cooperative, over and above those normally incurred by a standard customer.

	<u>Billing Supervisor Costs</u>		<u>Billing Clerk Costs</u>	
Wage	\$ 54.31	75%	\$ 23.64	68%
Social Security	\$ 3.34	5%	\$ 1.43	4%
Medicare	\$ 0.78	1%	\$ 0.33	1%
Workmans Comp	\$ 0.07	0%	\$ 0.06	0%
Insurance	\$ 3.65	5%	\$ 4.27	12%
Disability	\$ 0.55	1%	\$ 0.28	1%
401k	\$ 1.24	2%	\$ 0.55	2%
Retirement	\$ 7.62	11%	\$ 3.37	10%
H.S.A.	\$ 0.81	1%	\$ 0.81	2%
	<u>\$ 72.37</u>		<u>\$ 34.74</u>	

Dixie Escalante will charge the connect fee in advance of installation of the net meter for two reasons:

1. To be consistent with Dixie Escalante's policies to collect costs from those who cause the new and additional costs, such as Impact Fees and Construction Costs, rather than putting them into the Cooperative's general rates; thereby minimizing finance costs and cross subsidies and keeping rates low and equitable to all ratepayers.
2. There is the risk that net metering customers may abandon the solar and wind facility after some experience with it, which will saddle the Cooperative's ratepayers with all remaining uncollected costs associated with a Net Meter.

Monthly Customer Charge:

Dixie Escalante proposes to charge a monthly customer service charge of \$34.74 per month for Net Metering customers in addition to the standard \$8 per month customer service charge to help pay for the new and incremental costs over and above those incurred by non-net meter customers.

The standard billing procedure, which is covered by the \$8/month customer service charge, entails the automatic reading of the meters via the Turtle brand automatic meter reading system, and then the automated billing system creates and prints the power bills, which are stuffed into envelopes via machine, and mailed via bulk rate.

In contrast, the Net Meters will be read via the Turtle automatic meter reading system, but then the billing clerk will have to manually (1) extract the double meter reading (kWh produced and kWh delivered), (2) hand calculate the bill, (3) type it into a Word document and (4) print it, fold it, place it into an envelope, affix a postage stamp and deliver it to the mail box. This manual process takes at least one additional hour over and above the standard billing procedure, assuming that the whole process goes smoothly. The cost of the one additional hour of a billing clerk's time is \$34.74 (see breakout of time above), which is the proposed additional monthly customer service charge for Net Metering customers.

Conclusion:

Unlike utilities in the State of Arizona, Dixie Escalante has no surcharge on customer bills to create a RES fund from which incremental net metering costs can be recovered, nor does the Cooperative have any profit margin to reduce. So, all new and incremental costs should be recovered from the Net Metering customers. Otherwise, the rest of Dixie Escalante's Arizona and Utah customers will bear the new and incremental costs associated only with net metering customers.

Avoided Cost:

Commission Rule R14-2-2302 states, "Avoided costs means the incremental costs to an Electric Utility for electric energy or capacity or both which, but for the purchase from the Net Metering Facility, such utility would generate itself or purchase from another source." Dixie Escalante's incremental cost of power is the incremental charges for energy or demand from Deseret Generation & Transmission Cooperative (DGT). DGT's incremental energy charge to Dixie is \$0.015 per kWh. This charge has been unchanged for several years and is the same for all hours, days and months. Another consideration is energy losses. To deliver a kWh to a secondary voltage customer, Dixie must purchase that kWh plus the related energy losses between the customer and the generator. The same is true for each kW of coincident demand. We estimate secondary energy losses for Arizona at about 8.3 percent. For energy losses of 8.3 percent, the avoided cost at the generator for a kWh to a secondary voltage customer is equal to 1.083 times the price per kWh at the generator. Therefore, Dixie's avoided cost for a secondary

voltage kWh is about \$0.0162. Avoided capacity costs occur when Dixie's incremental demand at the time of the DGT monthly peak is reduced. Capacity provided by a Net Metering Facility only causes Dixie to avoid a demand charge at DGT when the Net Metering Facility is generating excess power coincident with a DGT monthly peak. Dixie's metering system is not capable of measuring a Net Metering customer's coincident demands. Therefore, the only avoided cost in the Net Metering Schedule is for the incremental energy cost.



Manufacturer's Representative Since 1934

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Arvada, CO 80004
Ph: (303) 463-7549
Fax: (303) 463-7558
doug@hadenver.com
www.hadenver.com

Quotation

Date: 01/08/09

Quote # 010809

Valid for: 30 days

Reference: Landis + Gyr Meters

To: Dixie Escalante Electric
Attn: Tom Thomas

Phone:
Fax: 435-673-3315
e-mail:
Other:

From: Doug J. Schmidt

Item	Qty.	Description	Lead Time	Price ea.
1	4	AXS4e 2S 240V Meter w/ Battery w/ Hunt TS1 Module L+G purchased and installed Cat. 4F070DXA-0000-H310	3-4 weeks	377.66

Please call if you need help programming this meter.

Notes:
Net 30 days, Frt included.

Thank you,
Doug J. Schmidt
Doug J. Schmidt

Fed # 84-0569556 • CO #01-55460 • Arvada # 21813
Member EERA

3 B 11
3 B meters
400

NORTHERN POWER EQUIPMENT
376 SUNLAND DRIVE SUITE 5
ST. GEORGE UT. 84770
435-634-7663
435-634-8043 FAX

QUOTATION

TO: Dixie Escalante

DATE: 10-15-09

Meters

ATTN: Tom T.

QTY: _____ DESCRIPTION _____ UNIT ~~TOTAL~~

1.	TBD	Single Phase		
2.		Focus 23 W/TSI Installed.		112.00 ea
3.		Focus 4S		140.27
4.		Focus 12S		160.25
5.				
6.	TBD	Three Phase		
7.		AXS4E-9S W/TSI Installed.		409.39 ea.
8.		AXS4E 12S		409.39
9.		AXS4E 16S		409.39
10.				
11.				
12.		Thanks,		
13.		Ryan		
14.				
15.				
16.				
17.				
18.				